

HUMAN ETHOLOGY NEWSLETTER

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HUMAN ETHOLOGY ABSTRACTS

Bob Adams edited the Human Ethology Abstracts for 1979, and they are in press for Man-Environment Systems, where the first two editions were published.

The 1980 abstracts will be edited by Larry Stettner, Dept. of Psychology, Wayne State University, Detroit, MI, 48202 USA. The job is a difficult one and requires hours of searching the journals of several disciplines. Computer searches are not helpful at this stage of our discipline for a number of reasons. If you want to see the Human Ethology Abstracts continue as a valuable compendium you must provide some assistance. Send abstracts of your papers, published and unpublished, to Larry. Encourage your colleagues and your students to do likewise. You might also be of some service by abstracting a few articles you have recently found useful in your own research and send these along to Larry as well. If each person who receives this newsletter were to abstract five papers we could all profit immensely. Think of it as an opportunity for reciprocal altruism.



MEMBERSHIP SURVEY

The summer issue of the newsletter contained a membership survey regarding our meeting locations and the possibility of having a meeting of our own, independent of another organization. Steve Thayer received replies and had planned to tabulate and interpret results. However, the number of responses was so small that a formal tabulation of results was not necessary. Even among those who did respond, there was no obvious consensus. Therefore, the society will continue to have annual business meetings appended to the meetings of the Animal Behavior Society, and to present human ethology research interspersed with the regular program of ABS.

* BOOKS

Gary Mitchell. Behavioral Sex Differences in Nonhuman Primates. New York: Van Nostrand Reinhold, 1979, 544 pp 6x9.

The book is an overview of psychobiological sex differences in primates. Taxonomically organized (all 55 genera are included), it examines literature derived from both field and laboratory research in primatology, zoology, animal behavior and animal husbandry, as well as anthropology, psychology, psychiatry, and endocrinology. Although human beings are not treated in depth, the relevance of the studies to human behavior is discussed throughout the volume. While the volume focuses on behavior that is commonly called "instinctive", it describes numerous studies that demonstrate how intentionality and self-awareness are present in the great apes, and how these characteristics result in behavioral sex differences that are complex, unpredictable, and changeable.

James Erwin, T. Maple, & G. Mitchell (Eds.) Captivity and Behavior. Primates in Breeding Colonies, Laboratories and Zoos. New York: Van Nostrand Reinhold, 1979.

This volume examines the influence of captive environments on eleven different species of apes and monkeys. The authors discuss environmental enrichment techniques, crowding, birth in captivity, and behavioral engineering, as well as the development of social bonds and patterns of abnormal behavior caused by a variety of settings. They evaluate techniques for encouraging adequate behavioral development and reducing aggressive behavior and depression. Information is provided on a number of factors reputed to affect human development and behavior, particularly those suspected of producing mental retardation, emotional disturbances, or personality disorders.

Pierre van Den Berghe Human Family Systems. New York: Elsevier North-Holland, 1979
254 pp. \$8.95 paper, \$17.95 cloth

This text stresses the importance of studying human kinship and marriage from an integrated evolutionary perspective that includes genetic, ecological and cultural factors.

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Pierre van den Berghe Man in Society: A Biosocial View. New York: Elsevier North-Holland, 2nd edition, 1978, 368 pp. \$7.95 paper, \$12.95 cloth

This introductory text focuses on four issues : a) determinism vs. freewill, b) objectivity to which only the "dishonest or naive" researcher lays claim; c) the use of comparative data, and d) human biology.

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Joan S. Lockard (Ed.) *The Evolution of Human Social Behavior*. New York: Elsevier North-Holland, 1980, 320pp, in press.

An examination of distal causation of social behavior, i.e., evolutionary, cultural, and historical explanations.

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Daniel G. Freedman *Human Sociobiology: A Holistic Approach*, New York: Free Press, 1979, 242 pp, \$12.95 cloth

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Shelby J. Haberman *Analysis of Qualitative Data*, Vol I, New York: Academic Press, 1978, 384 pp, \$19.50

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Euclid O. Smith *Social Play in Primates*, New York: Academic Press, 1978, 342 pp.

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John Paul Scott (Ed.) *Critical Periods*, New York: Academic Press, 1978, 400pp \$29.50

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CURRENT CONTENTS



Members of the Society for Human Ethology are encouraged to send announcements concerning recent publications (books, articles, proceedings, or dissertations) related to human ethology for inclusion in the newsletter. They are also encouraged to send announcements concerning their own papers presented at meetings and conferences and unpublished manuscripts as well. Announcements should contain a full reference citation or the author's affiliation so that readers may obtain copies.

Roger D. Masters (Dartmouth College) *The Political Implications of Sociobiology*
Part I: Inclusive Fitness Theory and the Western Tradition
Part II: The Radical Consequences of Inclusive Fitness Theory
Part III: Birth Control, Celibacy, and Inclusive Fitness
Paper presented at the Second Annual meeting of the International Society of Political Psychology, Washington, D. C., 1979

Steven A. Peterson (Alfred University, N.Y.) *Sociobiology and Reification*.
Prepared for delivery at American Political Science Assoc. meeting,
Washington, D.C., 1979

Ritch C. Savin-Williams (Cornell University) Dominance Hierarchies in Groups of Early Adolescents. Child Development, 1979, vol. 50.

Ritch C. Savin-Williams (Cornell University) Dominance Hierarchies in Groups of Middle to Late Adolescent Males. Journal of Youth and Adolescence, in press.

Thomas A. Sebeok (Indiana University) Prefigurements of Art. Semiotica, 1979, 27,1-73.

* CONFERENCES *

Optimizing Environments: Research, Practice, and Policy

--- Call for Participation: Papers/Symposia/Workshops/Posters

Eleventh Annual Conference of the Environmental Design Research Association

Sponsored by: Center for Metropolitan Affairs & Public Policy, College of

Charleston, Charleston, South Carolina 29401

Dates: Conference dates March 2 - 6 1980

Deadline for submission of proposals: November 15, 1979

Information: Stephanie Sanders, Center for Metropolitan Affairs, College of Charleston, Charleston, South Carolina 29401 (803) 792-5737



THE FOLLOWING ARE GUIDELINES FOR THE ORGANIZATION OF SYMPOSIA AND INVITED PAPER SESSIONS FOR MEETINGS OF THE ANIMAL BEHAVIOR SOCIETY.

1. An invited paper session is a group of theme-related papers offered by invitation. This should be distinguished from a symposium, which is a composite review by several authorities of the present state of our knowledge on a topic of general interest, and a discussion of the important frontiers to be crossed by future research. An invited paper session might stress recent studies by the contributors, whereas a symposium would be most unlikely to do so.
2. Proposals for invited paper sessions and symposia should describe completely the scope and organization of the undertaking. They should be submitted to the Program Officer as far in advance as possible, so that they can be acted upon by the Executive Committee. Normally only one or two symposia would be accepted for a given meeting, and they would be held at such a time as to minimize conflicting concurrent activities. Invited paper sessions should not normally exceed one-half day in length, and only very exceptional symposia should run longer than one day.
3. Symposia should be organized in such a way as to stimulate thorough discussion among the contributors and with non-contributors in the audience.



FORUM



The Fall Forum focuses on methodology. The paper by Lee Togerson outlines the Datamyte 900 and its applications. Additional information can be obtained which provides examples from several field settings along with actual sample print outs of the data. Write to Lee Togerson for further assistance. The paper by Bob Adams and Robert Markley is a summary of a more extensive paper now under review for publication; send queries and comments to either author. If you have a different perspective on methodology, design, or analysis which you would like to express to the readers of the newsletter, send your comments (photocopy ready) to Cheryl Travis.

THE DATAMYTE 900

LEE TORGERSON
ELECTRO/GENERAL CORPORATION

The Datamyte 900 portable, electronic, battery operated data collector is described.

The Datamyte 900 is used to collect observed real time data in natural or laboratory settings. Data are stored in solid-state memory for transmission directly to a computer data file. The Datamyte 900 is controlled by an Intel 8080 microprocessor. Therefore, it can interface most microcomputers, minicomputers, and large time share computers.

Of the more than 500 Datamytes sold, many are being used by behavioral researchers in studies such as parent-child interaction, infant behavior, peer interaction in groups, teacher-pupil interaction, non-human primate, small animal, bird, and fish behavior.

Briefly, this is how it works.

Observations are keyed into the Datamyte memory according to a coding scheme predetermined by the researcher. The keyboard consists of 14 character keys (0-9, C, F, H and *). An internal clock automatically records elapsed time to the nearest 0.01 minute. For fixed interval sampling, an interval timer emits a tone through an earphone in switch selectable increments of .5, 1.0, 1.5, 2, 3, 4, 5, 10, 16 and 32 minutes. (Optional: 3, 6, 9, 12, 18, 24, 30, 60, 92 and 196 seconds.)

Coding schemes range from simple one-digit codes for mutually exclusive behaviors, up to 12 digit codes for complex, concurrent behavior categories.

For concurrent behavior, four strategies are known to this author:

1. Using an onset, termination or single-occurrence code as the last digit. (Sawin, et al., 1977)
2. Focal subject observation...changing the focal subject at specific intervals. (Conger, 1977)
3. Recording behaviors into mutually exclusive categories. For example, if look and talk are the behaviors to be observed, look is coded as one behavior, talk as a second behavior and look/talk as a third. (Bakeman, 1975)
4. Film or video tape the session, then score and rescore until all behaviors are measured.

The Datamyte offers four switch-selectable input modes:

IN-MODE 1 (Data Plus Time) --One to 12 characters may be displayed. Keying ENTER records the displayed characters plus elapsed time, separated by a comma.

IN-MODE 2 (One Character Autotime) --Keying any of the 14 character keys instantly records the character plus elapsed time.

IN-MODE 3 (Two Character Autotime) --Keying any one of the 14 character keys displays that character. Pressing a second key instantly records the two character plus elapsed time.

IN-MODE 4 (Data Only) --Same as In-Mode 1 except time is not recorded.

Data are stored and transmitted as serial ASCII characters. Transmission can be controlled by the computer via DC1 (X-ON, HEX 11), DC3 (X-OFF, HEX 13) or BEL (HEX 07) signals. Switch selectable baud rates are 110, 150, 300, 1200, 2400, and 4800. Data can be transmitted in either column or line format, with or without line numbers...also switch selectable.

A selection of standard cables is available for interfacing the Datamyte with RS232C, 20 ma current loop and TTL devices. Special cables can be provided when necessary.

The four 1b., 12" x 10" x 2" Datamyte is available in a number of models ranging from 8K to 32K memory. The LED (Light emitting diode) displays up to 12 characters at a time. A basic system, consisting of a Datamyte, a battery charger, spare battery and output cable, ranges from \$2000 to \$3000 depending on memory capacity. Options include a carrying case, automotive adaptor and a remote input module for automatically recording switch closures.

Computer programs generally are written by the user, although specific programs are available from some users. Statistical packages such as SPSS or SAS have been used.

More information, including current user applications, may be obtained from Lee Torgerson, Electro/General Corporation, 14960 Industrial Road, Minnetonka, MN 55343. Or call (612) 935-7704 collect.

References

- Bakeman, R. Untangling streams of behavior: Sequential Analyses of Observation data. In G. P. Sackett (Ed.), Observing Behavior: Volume II: Data Collection and Analysis Methods. Baltimore: University Park Press, 1978.
- Conger, R.D. & McLeod, D. Describing behavior in small groups with the Datamyte event recorder. Behavior Research Methods & Instrumentation, 1977, 9, 418-424.
- Sawin, D.B., Langlois, J.H., & Leitner, E.F. What do you say after you say Hello? Observing, coding, and analyzing parent-infant interactions. Behavior Research Methods & Instrumentation, 1977, 9, 425-428.



Sampling Methods in Observational Research: A Comparison By Computer Simulation

Robert M. Adams
Eastern Kentucky University

Robert P. Markley
Fort Hays State University

A computer simulation was designed to generate "behavior" with known, manipulable parameters, then sample the behavior using both point (instantaneous, momentary) and one-zero (interval) sampling methods. Parameters jointly manipulated were duration and frequency of response instances, total time spent in behavior, and sampling interval. Estimates from hit rates of total time spent in the behavior, or proportion of session occupied, were then compared with actual time spent in the behavior. The equivalent of over 200 hours of behavior was examined.

The results of the simulation were consistent with most existing literature for point sampling; the method yields an unbiased, highly accurate estimate of total time spent in the behavior. 82% of the estimates for 30-minute sessions were within $\pm 5\%$ error, and 94% within $\pm 10\%$. Accuracy remained high even when numbers of observations was less than 100 and when the ratio of sampling interval to response or bout duration was 2/1.

One-zero sampling, recording a "hit" if the behavior was observed at any time in the observation interval, tends to overestimate total time spent in the behavior, and the degree of overestimation increases as the ratio of observation interval to mean response duration increases. Overestimation was about 100% when the sampling interval was double the mean response duration.

This change in error is particularly critical for studies involving short responses, or those which involve some intervention which is likely to change the characteristics of the behavior.

A limited number of copies of a more complete manuscript, including literature review, is available from Robert M. Adams, Department of Psychology, Eastern Kentucky University, Richmond, Ky. 40475.

WINTER FORUM

TEACHING HUMAN ETHOLOGY

The winter quarter forum will focus on teaching human ethology. One way to promote the field of ethology is to introduce it to the graduate and undergraduate curriculum. A number of such courses are being taught around the country under a variety of titles. The International Society for Human Ethology would like to collect a resource file on such courses which includes course outlines, information on possible textbooks, resource materials, films, class projects, assessment of performance, or any related information. If you do not actually teach such a course but have opinions about what should be included in a course outline, please consider submitting a statement. Send manuscripts to Joan Lockard, Dept. of Neurological Surgery, University of Washington, Seattle, Washington, U.S.A.; papers must be received by January 1.

SPRING FORUM

THE TROUBLE WITH HUMAN ETHOLOGY

Over the past two years, the forum topics have concerned a variety of controversial issues as well as serving an information function. Now is the time to do some thinking about characterizing our field as a whole, paying particular attention to those aspects which should be elaborated, incorporated, or perhaps eliminated. This forum is inspired partly by the article by Eibl-Eibesfeldt on human ethology which appeared in Behavioral and Brain Sciences, 1979, 2, 1-57. This is not a call for papers outlining human ethology as it now exists, but as it should be developed in the future. If human ethology is to advance as a productive and significant field of research, what sorts of problems, methods, and theories need to be addressed or developed?

Forum contributors should send their papers, photocopy ready, single spaced with one inch margins. The papers should not exceed 1000 words and references should be kept to a minimum. Send manuscripts to Cheryl Travis, Department of Psychology, University of Tennessee, Knoxville, Tn. 37919

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COMMENT: Wilson's On Human Nature

The series of review statements on Wilson's On Human Nature--while in principle an excellent idea--might tend to lend too much attention to that single book, thereby detracting from others. Since Wilson's use of social and political theory is relatively unsophisticated, many social scientists are put off by his latest book even more (if possible) than by Sociobiology. Worse, from my own point of view, is a tendency to confuse motivation and behavior. Finally, like George Michel (Summer issue of Newsletter), I'd agree that the book lacks a kind of scientific rigor that--as Darwin taught us--should be the goal even in popularly accessible scientific writing. One can therefore respect

prefer more attention be paid to new and more rigorous work. For example, Chagnon and Irons' Evolutionary Biology and Human Social Behavior (for a statement of recent technical work) or Lionel Tiger's Optimism: The Biology of Hope (for a more popularly accessible and thought-provoking statement) have been more useful to me, and will probably contribute more to the future growth of the discipline. In short, I would argue that the time is past when we need worry about "converting" scholars to the study of sociobiology; now, there are enough of us in the field that we must begin to show that it is a discipline (in every sense of the word)--and one that has sufficient intellectual merit and strength to stand on its own.

Roger Masters
Dartmouth College

INTERNATIONAL SOCIETY FOR HUMAN ETHOLOGY

Membership and Newsletter Subscriptions

The ISHE was formed with the goal of promoting ethological perspectives in the study of humans, examined within the context of individual development, group relations, and cultural patterns. Part of this perspective involves the methodology of naturalistic observation, and part involves the theoretical approaches of natural selection and comparative analysis. The society maintains an executive board and a number of committees, publishes a quarterly newsletter, collates an annual selection of human ethology abstracts, and meets annually in conjunction with the Animal Behavior Society. Membership and subscription to the newsletter are maintained on a calendar year basis. Dues and subscriptions are payable every January; this is true regardless of when you joined the society during the previous year. In order to retain membership in the society and continue to receive the newsletter, dues must be paid by January 20, 1980. The fee is \$5.00 payable to Society for Human Ethology.

1980 Membership/Subscription: Name _____

University/Institute _____ Dept. _____

City _____ State/Province _____

Country _____ Postal Code _____

Mail fees to Dr. Cheryl Travis, Dept. of Psychology, University of Tennessee, Knoxville, Tennessee, USA 37916. Send only U.S. currency or drafts on U.S. banks.

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Newsletter materials should be prepared photocopy ready, single spaced with one inch side margins. The deadline for submission of materials is the first day of each quarter of the year, January first, April first, July first, October first. Send material to Dr. Cheryl Travis, Dept. of Psychology, University of Tennessee, Knoxville, Tennessee, U.S.A. 37916